

**ACTIVE DUTY – U.S. ARMY
NOISE-INDUCED
HEARING INJURY
QUARTERLY SURVEILLANCE
Q3 2011 thru Q4 2013**

Approved for public release, distribution unlimited

2014



Active Duty-U.S. Army Noise Induced Hearing Injury Quarterly Surveillance Q3 2011 thru Q4 2013

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**ACTIVE DUTY- U.S. ARMY
NOISE INDUCED HEARING INJURY
QUARTERLY SURVEILLANCE
Q3 2011 THRU Q4 2013**

EXECUTIVE SUMMARY

PURPOSE:

The Department of Defense (DOD) Hearing Conservation Working Group, the U.S. Army Public Health Command, the Armed Forces Health Surveillance Center and the Hearing Center of Excellence collaborated to develop new DOD and individual Services' Noise-Induced Hearing Injury (NIHI) surveillance data. The purposes of these NIHI data summaries are as follows:

- To present and summarize available Army medical surveillance data for use in noise-induced hearing injury (NIHI) prevention program and policy planning, including -
 - Defining the relative impact of NIHI among U.S. Army Active Duty personnel in the total Army and at individual Army installations.
 - Providing Army injury rates and trends from Q3 2011 thru Q4 2013.
 - Identifying demographics most closely associated with NIHI incidence.
- To monitor progress-based metrics for reducing the NIHI morbidity burden over time.

The first NIHI data summary established a baseline against which future years' data can be compared for assessment of NIHI trends as prevention performance indicators.

CONCLUSIONS:

The Army NIHI quarterly surveillance summary for calendar years Q3 2011 THRU Q4 2013 shows incident case rates for sensorineural hearing loss significant threshold shift, tinnitus, and Noise-Induced Hearing Loss.

RECOMMENDATIONS:

Commanders and Preventive Medicine assets at multiple levels should use NIHI data summaries trends to maintain situational awareness of the progress of NIHI prevention operations.

**Active Duty-U.S Army
Noise Induced Hearing Injury
Quarterly Surveillance
Q3 2011 thru Q4 2013**

REFERENCES:

References are listed in Appendix A.

AUTHORITY:

Under Army Regulation (AR) 40-5, Section 2-19, the U.S. Army Public Health Command (USAPHC) is responsible for providing support for Army Preventive Medicine (PVNTMED) assets to include review and interpretation of surveillance data and identification and characterization of health problems as a foundation for injury prevention planning and policy efforts.

Under Department of Defense Instruction 6055.12 Hearing Conservation Program, Enclosure 2, Section 3 requires The Heads of the DOD components to annually evaluate the effectiveness of their hearing conservation programs (HCPs).

Under Department of Defense Directive (DODD) 6490-02E Comprehensive Health Surveillance, 2012; Section 1 paragraph c establishes the Armed Forces Health Surveillance Center (AFHSC) as the single source for DOD-level health surveillance information.

Under DODD 6200.04 Force Health Protection, Section 4.3.1.2 requires DOD components to promote and improve the health of the force through programs on injury prevention.

BACKGROUND:

Background details can be found in the annual Summary for calendar year (CY) 2007-2011.

Quarterly data time series will be updated semi-annually to provide a 10 quarter “moving window” of finer grained details compared to annual summaries.

METHODS:

Methods details can be found in the annual Summary for CY 2007-2011. The quarterly summary data are reported as is without statistical analysis.

Source: Defense Medical Surveillance System (DMSS).
Prepared by Armed Forces Health Surveillance Center (AFHSC).

RESULTS:

Results are shown in Appendix C.

SUMMARY AND CONCLUSIONS:

AFHSC and the Army Institute of Public Health will continue to provide annual and quarterly data summaries to support NIHI prevention coordination and planning by Army PVNTMED assets and unit commanders at multiple levels. The counts and rates of Noise Induced Hearing Injury “incident cases” are the principle prevention performance metrics. Incident cases are important because they represent cases that might have been prevented if prevention strategies planning and operations were effective.

APPENDIX A REFERENCES

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APPENDIX B
INJURY DIAGNOSIS CODES (ICD-9-CM CODES)
CATEGORIZATION BY DIAGNOSTIC GROUPS,
CURRENT PROCEDURE TERMINOLOGY (CPT) CODES
AND DOD OCCUPATION CODES
USED IN THESE DATA SUMMARIES

ICD-9 Codes

	Category	Code	Code Description
SNHL	Sensorineural hearing loss	38910	SENSORINEURAL HEARING LOSS UNSPECIFIED
SNHL	Sensorineural hearing loss	38911	SENSORY HEARING LOSS
SNHL	Sensorineural hearing loss	38915	SENSORINEURAL HEARING LOSS, UNILATERAL
SNHL	Sensorineural hearing loss	38916	SENSORINEURAL HEARING LOSS, ASYMMETRICAL
SNHL	Sensorineural hearing loss	38917	SENSORY HEARING LOSS, UNILATERAL
SNHL	Sensorineural hearing loss	38918	SENSORINEURAL HEARING LOSS, BILATERAL
NIHL	Noise-induced hearing loss	38810	NOISE EFFECTS ON INNER EAR UNSPECIFIED
NIHL	Noise-induced hearing loss	38811	ACOUSTIC TRAUMA (EXPLOSIVE) TO EAR
NIHL	Noise-induced hearing loss	38812	NOISE-INDUCED HEARING LOSS
SHIFT	Significant threshold shift	79415	NONSPECIFIC ABNORMAL AUDITORY FUNCTION STUDIES
TINN	Tinnitus	38830	TINNITUS UNSPECIFIED
TINN	Tinnitus	38831	SUBJECTIVE TINNITUS
TINN	Tinnitus	38832	OBJECTIVE TINNITUS

CPT Codes Used in the Data Summaries

AUDIO	CPT codes	92552	PURE TONE AUDIOMETRY (THRESHOLD); AIR ONLY
AUDIO	CPT codes	92555	SPEECH AUDIOMETRY THRESHOLD;
AUDIO	CPT codes	92556	SPEECH AUDIOMETRY THRESHOLD; WITH SPEECH RECOGNITION
AUDIO	CPT codes	92557	COMPREHENSIVE AUDIOMETRY THRESHOLD EVALUATION AND SPEECH RECOGNITION
AUDIO	CPT codes	92559	AUDIOMETRIC TESTING OF GROUPS

DOD Occupation Codes used in the data summary

NEW DOD Code	DOD CODE TITLE
10	<i>Infantry, Gun Crew, and Seaman</i>
11	<i>Electronic Equipment Repairers</i>
12	<i>Communications and Intelligence Specialists</i>
13	<i>Health Care Specialists</i>
14	<i>Other Technical and Allied Specialists</i>
15	<i>Functional Support and Admin</i>
16	<i>Electrical/Mechanical Equipment Repairers</i>
17	<i>Craftswork & Construction</i>
18	<i>Service, Transport & Supply</i>
19	<i>Students & Trainees (Enlisted)</i>
21	<i>General/Flag. Officers & Executives</i>
22	<i>Tactical Operations Officers</i>
23	<i>Intelligence Officers</i>
24	<i>Engineering & Maintenance Officers</i>
25	<i>Scientists & Professionals</i>
26	<i>Health Care Officers</i>
27	<i>Administrators</i>
28	<i>Supply & Logistics Officers</i>
29	<i>Students, Trainees & Other Officers</i>

APPENDIIX C
TOTAL ARMY QUARTERLY DATA DETAILS

Active Duty- U.S. Army
NIHI Quarterly Surveillance Q3 2011 – Q4 2013

US Army Noise-Induced Hearing Injuries, by diagnosis, Q3 2011 - Q4 2013

	Q3 2011		Q4 2011		Q1 2012		Q2 2012		Q3 2012		Q4 2012		Q1 2013		Q2 2013		Q3 2013		Q4 2013	
	Count	Rate ¹	Count	Rate ¹	Count	Rate ¹	Count	Rate ¹	Count	Rate ¹	Count	Rate ¹	Count	Rate ¹	Count	Rate ¹	Count	Rate ¹	Count	Rate ¹
Count (Rate¹)																				
Sensorineural hearing loss	1,874	14.04	1,907	14.45	2,164	16.71	2,281	17.76	1,848	14.34	1,726	13.57	1,815	14.71	1,723	13.92	1,670	13.41	1,683	13.67
Significant threshold shift	3,210	23.97	2,343	17.74	2,324	17.93	2,742	21.35	3,043	23.65	2,126	16.78	1,955	15.90	2,208	17.92	2,377	19.19	1,919	15.69
Noise-induced hearing loss	306	2.19	319	2.31	346	2.55	284	2.10	339	2.50	314	2.35	198	1.52	210	1.61	246	1.88	238	1.83
Tinnitus	2,047	15.01	1,890	14.02	2,351	17.77	2,308	17.60	2,086	15.86	2,047	15.78	2,210	17.56	2,071	16.42	1,838	14.49	1,806	14.40

US Armed Forces (DoD) Noise-Induced Hearing Injuries, Active Component, by diagnosis, Q3 2011 - Q4 2013

	Q3 2011		Q4 2011		Q1 2012		Q2 2012		Q3 2012		Q4 2012		Q1 2013		Q2 2013		Q3 2013		Q4 2013	
	Count	Rate ¹	Count	Rate ¹	Count	Rate ¹	Count	Rate ¹	Count	Rate ¹	Count	Rate ¹	Count	Rate ¹	Count	Rate ¹	Count	Rate ¹	Count	Rate ¹
Sensorineural hearing loss	3,570	10.47	3,682	10.89	4,146	12.46	4,449	13.45	3,666	10.99	3,366	10.17	3,575	11.08	3,610	11.07	3,637	11.04	3,406	10.42
Significant threshold shift	4,094	11.80	3,230	9.39	3,651	10.80	3,855	11.47	3,437	10.14	2,312	6.89	2,384	7.28	2,500	7.56	2,824	8.45	2,224	6.70
Noise-induced hearing loss	484	1.38	507	1.45	595	1.73	529	1.55	594	1.72	514	1.50	436	1.31	469	1.39	460	1.35	401	1.18
Tinnitus	4,087	11.81	4,160	12.13	5,011	14.85	5,147	15.35	4,544	13.44	4,415	13.18	4,981	15.26	4,773	14.48	4,421	13.28	4,051	12.26

1. A person can be counted in more than one diagnosis type, but only once (life-time) for each. Rate is provided per 1,000 person-years.
2. Includes only data through the last available full quarter

Source: Defense Medical Surveillance System (DMSS) as of 21-NOV-2014

Prepared by Armed Forces Health Surveillance Center (AFHSC) as of 04-DEC-2014

Active Duty- U.S. Army
NIHI Quarterly Surveillance Q3 2011 – Q4 2013

US Army SENSORINEURAL HEARING LOSS diagnoses, Q3 2011 - Q4 2013																				
	Q3 2011		Q4 2011		Q1 2012		Q2 2012		Q3 2012		Q4 2012		Q1 2013		Q2 2013		Q3 2013		Q4 2013	
	Count	Rate ¹	Count	Rate ¹	Count	Rate ¹	Count	Rate ¹	Count	Rate ¹	Count	Rate ¹	Count	Rate ¹	Count	Rate ¹	Count	Rate ¹	Count	Rate ¹
NORTHERN																				
Aberdeen Proving Ground, MD	1	4.46	2	10.02	4	20.47	3	15.33	5	25.72	3	15.53	0	0.00	3	15.40	0	0.00	3	15.13
Fort Belvoir, VA	3	4.39	3	3.88	7	9.19	8	10.41	3	3.68	9	11.22	8	10.48	7	9.03	5	6.24	11	13.86
Fort Bragg, NC	98	8.24	98	8.25	157	13.31	134	11.43	117	9.96	80	6.81	118	10.47	115	10.25	82	7.24	125	11.02
Fort Detrick, MD	2	8.93	6	23.33	6	27.42	2	10.11	6	30.73	5	25.44	4	20.79	4	20.48	2	9.90	3	15.04
Fort Dix, NJ	2	28.99	4	57.12	4	54.80	5	68.36	1	14.02	3	42.72	3	41.66	5	67.71	2	27.06	2	27.92
Fort Drum, NY	85	18.29	103	22.08	131	29.05	143	32.80	90	20.93	77	18.51	82	20.28	63	15.56	89	21.68	75	17.98
Fort Eustis, VA	8	5.48	9	6.46	5	3.88	5	4.06	8	6.61	6	4.98	5	4.22	9	7.35	3	2.33	3	2.26
Fort George G Meade, MD	7	9.76	11	15.06	12	16.40	14	18.68	6	7.78	11	14.17	6	8.07	9	11.73	6	7.76	10	12.87
Fort Knox, KY	37	14.97	43	19.95	101	50.07	64	29.29	48	21.22	35	16.76	72	36.86	47	21.84	36	16.38	29	14.45
Fort Lee, VA	15	8.33	14	7.97	14	8.56	17	10.69	10	6.00	9	5.23	11	6.67	11	6.18	9	4.99	13	7.98
Fort Myer, VA	3	6.51	3	6.53	1	2.16	6	12.84	5	10.34	8	15.30	9	17.47	12	23.15	4	7.70	6	11.84
Fort Monmouth, NJ	0	0.00	0	0.00	0	0.00	0	0.00	1	47.47	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Walter Reed AMC, DC	4	11.49	0	0.00	0	0.00	0	0.00	0	0.00	1	794.02	0	0.00	0	0.00	0	0.00	0	0.00
West Point USMA, NY	3	7.81	4	10.65	3	8.33	5	13.46	3	7.91	6	16.50	2	5.77	4	11.04	4	10.88	2	5.61
SOUTHERN																				
Fort Benning, GA	85	15.15	57	10.30	99	17.82	71	12.66	75	13.44	53	9.65	53	9.74	84	15.18	89	15.87	107	19.94
Fort Campbell, KY	137	16.72	150	18.44	216	27.40	250	32.46	209	27.81	128	17.41	113	15.94	78	10.94	91	12.52	101	13.92
Fort Gordon, GA	26	12.65	19	9.96	22	12.11	33	17.64	24	12.73	14	7.69	24	13.43	23	11.84	17	8.52	20	10.15
Fort Hood, TX	114	10.02	107	9.56	103	9.36	140	12.88	137	12.69	120	11.45	114	11.54	119	12.17	144	14.71	118	12.20
Fort Jackson, SC	42	21.08	32	15.73	31	15.04	23	11.40	27	11.76	19	8.21	27	10.72	33	13.49	33	14.50	31	13.51
Fort McPherson, GA	4	90.86	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Fort Polk, LA	69	32.56	56	26.50	107	52.34	43	22.04	56	29.02	38	19.66	32	16.88	50	26.05	31	15.99	25	12.82
Fort Rucker, AL	11	12.14	9	10.14	7	8.05	9	10.37	13	14.64	4	4.53	9	10.66	10	12.23	9	10.68	6	7.37
Fort Sam Houston, TX	27	13.84	29	15.55	11	5.89	17	8.35	17	8.06	28	13.31	38	18.48	29	14.27	29	14.00	19	9.21
Fort Sill, OK	20	6.64	35	12.83	26	9.79	10	3.65	31	10.72	28	9.87	17	6.03	17	6.25	16	5.61	23	8.46
Fort Stewart, GA	83	18.10	65	14.57	59	13.56	50	11.66	68	15.50	45	10.44	62	15.02	36	8.81	51	12.30	47	11.27
Redstone Arsenal, AL	1	5.07	9	52.87	4	24.97	2	12.27	3	17.74	4	24.27	1	6.30	3	18.34	5	29.75	5	30.51
WESTERN																				
Fort Bliss, TX	184	29.78	101	15.31	109	16.38	112	16.93	108	16.27	120	18.29	90	14.42	80	12.76	109	16.98	141	21.73
Fort Carson, CO	78	12.15	139	21.75	112	17.97	107	17.55	127	20.87	140	23.43	159	26.96	130	22.05	98	16.51	79	13.20
Fort Huachuca, AZ	7	5.84	8	7.13	4	3.66	4	3.75	8	7.65	12	11.94	7	7.21	6	5.76	1	0.93	6	5.90
Fort Irwin, CA	12	11.27	18	17.38	15	14.94	9	9.09	9	8.88	17	16.90	19	19.85	8	8.44	13	13.92	10	11.07
Fort Leavenworth, KS	3	3.81	13	16.61	9	11.57	12	15.87	7	8.57	4	4.92	4	5.05	7	8.87	15	17.89	23	28.02
Fort Leonard Wood, MO	31	12.51	37	16.14	58	25.08	69	29.30	55	23.79	54	22.08	86	33.61	65	24.76	41	16.83	29	12.27
Fort Lewis, WA	85	11.01	127	16.02	172	21.77	139	17.48	84	10.29	134	16.55	119	15.28	166	21.47	119	15.45	112	14.59
Fort Richardson, AK	47	27.69	50	29.42	10	5.91	22	12.95	23	13.26	44	25.32	14	8.25	21	12.64	24	14.75	18	11.23
Fort Riley, KS	115	25.44	123	26.84	120	26.14	133	29.87	89	20.35	87	20.29	101	24.68	84	20.64	111	27.21	122	29.78
Fort Wainwright, AK	18	11.41	14	8.99	13	8.60	59	39.40	28	18.73	19	13.29	21	15.06	25	17.00	36	23.60	35	24.25
PACIFIC																				
Camp Carroll	0	0.00	1	5.97	2	12.78	0	0.00	0	0.00	2	12.02	1	6.20	0	0.00	0	0.00	1	5.78
Camp Casey	6	4.48	4	3.17	5	4.12	9	7.32	6	4.88	3	2.44	12	10.17	12	9.86	10	7.81	4	3.15
Camp Humphreys	4	5.37	4	5.32	6	8.39	4	5.67	2	2.83	3	4.14	6	8.42	2	2.69	5	5.71	3	3.42
Camp Long	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Camp Stanley/Red Cloud	0	0.00	1	36.45	0	0.00	0	0.00	0	0.00	1	38.71	0	0.00	0	0.00	0	0.00	0	0.00
Japan	2	11.13	2	11.35	0	0.00	1	5.74	0	0.00	0	0.00	1	5.66	1	5.44	1	5.45	2	11.76
Schofield Barracks-Wheeler AAF	126	31.20	98	25.12	91	23.76	191	50.41	86	22.40	95	24.83	106	28.51	84	22.82	101	27.40	93	25.36
USA Hawaii	1	15.71	3	45.75	3	46.90	0	0.00	0	0.00	1	15.30	2	31.17	0	0.00	2	31.86	1	15.68
Yongsan Garrison	12	9.53	9	11.19	7	8.26	4	4.74	10	11.60	5	5.83	6	7.08	8	8.93	3	3.08	5	5.07
EUROPEAN																				
Ansbach	2	6.31	4	12.25	5	13.97	3	8.36	3	8.18	0	0.00	1	2.89	1	3.22	0	0.00	0	0.00
Baden-Wuerttemberg	12	11.34	8	8.53	2	2.18	12	13.82	4	5.54	6	10.98	9	22.18	6	23.88	1	5.53	1	4.59
Bamberg	19	22.44	15	16.44	12	13.93	31	41.53	6	8.83	5	8.12	7	12.55	10	19.25	0	0.00	3	19.46
BeNeLux	0	0.00	0	0.00	2	14.63	1	7.33	3	22.00	2	14.86	1	7.51	0	0.00	0	0.00	0	0.00
Grafenwoehr	7	11.36	1	1.74	3	5.53	8	15.29	9	16.93	13	27.48	7	16.79	3	7.80	4	9.45	4	7.09
Kaiserslautern	1	31.32	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1	20.85
Schweinfurt	10	11.63	8	9.74	6	7.51	22	28.13	9	12.44	14	24.88	12	26.79	2	6.63	3	17.06	0	0.00
Stuttgart	0	0.00	0	0.00	0	0.00	1	23.11	1	25.92	0	0.00	0	0.00	0	0.00	0	0.00	1	27.61
Vicenza	9	13.70	7	10.60	22	33.99	10	15.29	1	1.90	2	3.85	5	9.85	6	11.42	5	9.33	6	9.41
Wiesbaden	5	11.48	0	0.00	6	13.16	5	11.29	1	2.17	5	9.82	3	5.65	3	5.45	9	17.19	2	4.52
1. Rate is provided per 1,000 person-years.																				

1. Rate is provided per 1,000 person-years.

Active Duty- U.S. Army
NIHI Quarterly Surveillance Q3 2011 – Q4 2013

US Army SIGNIFICANT THRESHOLD SHIFT diagnoses, Q3 2011 - Q4 2013																				
	Q3 2011		Q4 2011		Q1 2012		Q2 2012		Q3 2012		Q4 2012		Q1 2013		Q2 2013		Q3 2013		Q4 2013	
	Count	Rate ¹	Count	Rate ¹	Count	Rate ¹	Count	Rate ¹	Count	Rate ¹	Count	Rate ¹	Count	Rate ¹	Count	Rate ¹	Count	Rate ¹	Count	Rate ¹
NORTHERN																				
Aberdeen Proving Ground, MD	12	52.33	6	29.41	5	25.11	8	40.38	7	35.57	4	20.55	4	20.58	4	20.41	8	39.64	9	45.72
Fort Belvoir, VA	2	2.77	0	0.00	0	0.00	1	1.23	2	2.35	0	0.00	0	0.00	1	1.24	1	1.20	1	1.22
Fort Bragg, NC	227	19.38	203	17.35	295	25.43	114	9.88	506	43.72	174	15.11	134	12.10	124	11.20	136	12.15	169	15.07
Fort Detrick, MD	0	0.00	0	0.00	0	0.00	0	0.00	1	4.90	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Fort Dix, NJ	0	0.00	4	54.01	4	52.56	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1	12.31	0	0.00
Fort Drum, NY	1	0.21	5	1.03	79	16.82	143	31.56	93	20.91	11	2.56	0	0.00	2	0.48	2	0.47	4	0.92
Fort Eustis, VA	0	0.00	0	0.00	1	0.76	1	0.79	0	0.00	0	0.00	0	0.00	0	0.00	1	0.76	0	0.00
Fort George G Meade, MD	0	0.00	0	0.00	0	0.00	0	0.00	1	1.27	0	0.00	2	2.63	13	16.55	11	13.92	8	10.07
Fort Knox, KY	4	1.59	3	1.36	0	0.00	4	1.77	1	0.43	5	2.31	1	0.49	3	1.34	3	1.32	0	0.00
Fort Lee, VA	67	37.53	49	28.23	67	41.64	43	27.60	35	21.47	40	23.81	41	25.46	49	28.15	32	18.13	21	13.17
Fort Myer, VA	1	2.13	1	2.13	1	2.13	6	12.64	12	24.45	0	0.00	0	0.00	0	0.00	1	1.89	0	0.00
Fort Monmouth, NJ	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Walter Reed AMC, DC	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
West Point USMA, NY	1	2.53	0	0.00	1	2.69	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
SOUTHERN																				
Fort Benning, GA	1	0.17	3	0.53	5	0.88	11	1.92	3	0.53	3	0.53	6	1.08	8	1.42	11	1.92	4	0.73
Fort Campbell, KY	239	28.35	168	20.15	153	18.91	292	36.99	144	18.70	147	19.54	119	16.44	61	8.38	124	16.75	180	24.47
Fort Gordon, GA	55	26.25	24	12.36	12	6.50	9	4.73	1	0.52	0	0.00	1	0.55	1	0.51	2	0.99	1	0.50
Fort Hood, TX	259	25.21	192	18.82	187	18.47	370	36.82	316	31.45	294	29.94	366	39.33	413	44.76	464	50.25	248	27.13
Fort Jackson, SC	3	1.47	1	0.48	0	0.00	0	0.00	1	0.43	0	0.00	0	0.00	0	0.00	0	0.00	1	0.43
Fort McPherson, GA	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Fort Polk, LA	0	0.00	2	0.89	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1	0.50
Fort Rucker, AL	1	1.09	2	2.21	0	0.00	0	0.00	0	0.00	0	0.00	3	3.48	0	0.00	1	1.16	1	1.20
Fort Sam Houston, TX	44	22.27	25	13.24	26	13.71	45	21.81	57	26.76	78	36.88	59	28.61	43	21.12	31	14.92	6	2.90
Fort Sill, OK	1	0.33	1	0.36	1	0.37	0	0.00	2	0.68	0	0.00	0	0.00	0	0.00	2	0.69	1	0.36
Fort Stewart, GA	222	50.63	167	39.13	138	33.05	180	43.80	82	19.42	208	50.27	142	35.94	172	44.10	551	141.92	404	105.16
Redstone Arsenal, AL	1	4.73	0	0.00	1	5.79	0	0.00	0	0.00	0	0.00	0	0.00	3	17.06	0	0.00	0	0.00
WESTERN																				
Fort Bliss, TX	495	81.67	368	57.51	395	61.74	319	50.39	457	72.57	357	57.49	316	53.59	372	63.06	463	76.92	428	70.75
Fort Carson, CO	79	11.90	67	10.16	50	7.76	248	39.44	230	36.85	35	5.73	0	0.00	0	0.00	1	0.16	1	0.16
Fort Huachuca, AZ	10	8.22	1	0.88	0	0.00	0	0.00	0	0.00	23	22.58	10	10.19	4	3.80	5	4.65	2	1.96
Fort Irwin, CA	1	0.92	1	0.95	0	0.00	0	0.00	0	0.00	9	8.86	4	4.14	1	1.04	40	42.58	37	41.05
Fort Leavenworth, KS	1	1.23	1	1.24	0	0.00	0	0.00	4	4.76	0	0.00	0	0.00	1	1.23	0	0.00	0	0.00
Fort Leonard Wood, MO	7	2.70	5	2.09	2	0.83	7	2.86	12	5.00	0	0.00	0	0.00	1	0.37	0	0.00	0	0.00
Fort Lewis, WA	1,244	177.93	819	116.88	662	94.96	668	96.13	865	122.22	571	82.40	330	49.26	540	81.32	272	40.58	280	41.50
Fort Richardson, AK	22	12.30	63	35.42	6	3.41	3	1.70	25	13.95	24	13.38	41	23.52	8	4.74	1	0.61	0	0.00
Fort Riley, KS	0	0.00	0	0.00	0	0.00	1	0.21	1	0.22	2	0.44	0	0.00	1	0.23	1	0.23	0	0.00
Fort Wainwright, AK	5	3.05	2	1.24	4	2.55	0	0.00	1	0.64	2	1.34	11	7.61	145	96.67	4	2.60	0	0.00
PACIFIC																				
Camp Carroll	3	17.70	0	0.00	4	25.35	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	2	11.11	0	0.00
Camp Casey	0	0.00	1	0.79	2	1.65	0	0.00	1	0.81	0	0.00	0	0.00	0	0.00	2	1.57	0	0.00
Camp Humphreys	0	0.00	1	1.32	45	63.20	54	78.33	29	42.13	42	59.49	47	67.96	51	71.14	30	35.66	4	4.70
Camp Long	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Camp Stanley/Red Cloud	0	0.00	0	0.00	1	43.90	0	0.00	0	0.00	0	0.00	1	45.55	7	344.07	0	0.00	0	0.00
Japan	0	0.00	0	0.00	23	128.63	15	87.83	5	29.60	5	29.14	5	29.24	0	0.00	0	0.00	1	6.03
Schofield Barracks-Wheeler AAF	6	1.38	0	0.00	3	0.73	2	0.49	5	1.22	0	0.00	0	0.00	0	0.00	0	0.00	1	0.26
USA Hawaii	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Yongsan Garrison	9	7.06	2	2.46	16	18.58	9	10.51	17	19.67	7	8.20	13	15.57	5	5.69	8	8.34	0	0.00
EUROPEAN																				
Ansbach	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1	3.24	1	3.15	3	8.40
Baden-Wuerttemberg	0	0.00	0	0.00	0	0.00	1	1.11	0	0.00	1	1.75	5	11.75	0	0.00	0	0.00	0	0.00
Bamberg	1	1.14	1	1.06	3	3.36	0	0.00	0	0.00	0	0.00	3	5.20	1	1.87	4	10.33	0	0.00
BeNeLux	0	0.00	0	0.00	1	7.23	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Grafenwoehr	0	0.00	0	0.00	8	14.59	0	0.00	7	12.89	0	0.00	79	188.50	26	70.43	1	2.45	0	0.00
Kaiserslautern	1	30.09	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Schweinfurt	0	0.00	0	0.00	6	7.31	0	0.00	2	2.68	1	1.72	3	6.48	2	6.38	1	5.47	1	11.62
Stuttgart	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Vicenza	23	36.44	7	10.95	1	1.58	37	57.48	15	29.15	12	23.69	6	12.13	21	41.19	16	30.60	16	25.69
Wiesbaden	0	0.00	0	0.00	1	2.15	0	0.00	0	0.00	0	0.00	0	0.00	2	3.58	2	3.76	0	0.00
1. Rate is provided per 1,000 person-years.																				

1. Rate is provided per 1,000 person-years.

Active Duty- U.S. Army
NIHI Quarterly Surveillance Q3 2011 – Q4 2013

		Q3 2011		Q4 2011		Q1 2012		Q2 2012		Q3 2012		Q4 2012		Q1 2013		Q2 2013		Q3 2013		Q4 2013	
		Count	Rate ¹	Count	Rate ¹	Count	Rate ¹	Count	Rate ¹	Count	Rate ¹	Count	Rate ¹	Count	Rate ¹	Count	Rate ¹	Count	Rate ¹	Count	Rate ¹
NORTHERN																					
	Aberdeen Proving Ground, MD	1	4.07	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1	4.56	2	9.33
	Fort Belvoir, VA	1	1.37	0	0.00	2	2.46	0	0.00	0	0.00	1	1.17	0	0.00	0	0.00	0	0.00	0	0.00
	Fort Bragg, NC	81	6.64	45	3.69	81	6.68	64	5.30	67	5.53	55	4.54	79	6.79	71	6.13	60	5.13	62	5.29
	Fort Detrick, MD	1	4.19	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1	4.81	0	0.00	0	0.00	0	0.00
	Fort Dix, NJ	0	0.00	0	0.00	1	12.41	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
	Fort Drum, NY	3	0.62	3	0.61	1	0.21	2	0.43	0	0.00	0	0.00	0	0.00	0	0.00	1	0.23	2	0.45
	Fort Eustis, VA	1	0.66	3	2.07	3	2.24	5	3.91	1	0.79	2	1.60	1	0.81	0	0.00	1	0.75	0	0.00
	Fort George G Meade, MD	0	0.00	0	0.00	1	1.30	3	3.81	2	2.47	1	1.23	2	2.56	0	0.00	2	2.45	2	2.44
	Fort Knox, KY	4	1.54	3	1.32	2	0.93	1	0.43	1	0.42	2	0.90	0	0.00	2	0.88	0	0.00	0	0.00
	Fort Lee, VA	1	0.54	2	1.11	5	2.97	4	2.44	1	0.58	1	0.56	0	0.00	1	0.55	0	0.00	0	0.00
	Fort Myer, VA	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1	1.85	1	1.87	1	1.85	1	1.85	1	1.89
	Fort Monmouth, NJ	0	0.00	0	0.00	0	0.00	0	0.00	1	46.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
	Walter Reed AMC, DC	1	2.68	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
	West Point USMA, NY	0	0.00	2	5.11	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
SOUTHERN																					
	Fort Benning, GA	12	2.05	3	0.52	2	0.35	10	1.71	10	1.72	26	4.53	6	1.06	3	0.52	1	0.17	4	0.71
	Fort Campbell, KY	1	0.12	5	0.59	7	0.85	2	0.25	1	0.13	2	0.26	4	0.53	5	0.66	3	0.39	2	0.26
	Fort Gordon, GA	0	0.00	0	0.00	0	0.00	0	0.00	1	0.51	1	0.52	0	0.00	0	0.00	0	0.00	0	0.00
	Fort Hood, TX	3	0.25	6	0.52	3	0.26	1	0.09	2	0.18	2	0.18	1	0.10	0	0.00	2	0.20	1	0.10
	Fort Jackson, SC	5	2.43	1	0.48	1	0.47	2	0.96	3	1.27	3	1.26	2	0.77	1	0.40	0	0.00	0	0.00
	Fort McPherson, GA	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
	Fort Polk, LA	53	23.53	66	29.46	77	35.62	47	22.80	40	19.68	20	9.84	17	8.51	12	5.90	2	0.97	1	0.48
	Fort Rucker, AL	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
	Fort Sam Houston, TX	2	0.97	1	0.50	0	0.00	1	0.46	3	1.34	3	1.35	5	2.29	1	0.46	3	1.36	2	0.91
	Fort Sill, OK	0	0.00	0	0.00	0	0.00	1	0.35	0	0.00	2	0.68	0	0.00	0	0.00	0	0.00	0	0.00
	Fort Stewart, GA	2	0.42	1	0.21	2	0.44	2	0.44	0	0.00	0	0.00	0	0.00	1	0.23	1	0.23	2	0.46
	Redstone Arsenal, AL	0	0.00	0	0.00	1	5.66	1	5.54	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
WESTERN																					
	Fort Bliss, TX	7	1.07	6	0.86	3	0.43	5	0.71	3	0.43	2	0.29	7	1.06	0	0.00	13	1.91	11	1.60
	Fort Carson, CO	18	2.68	73	10.91	51	7.81	30	4.69	119	18.63	140	22.35	28	4.52	45	7.25	54	8.63	55	8.74
	Fort Huachuca, AZ	0	0.00	0	0.00	0	0.00	1	0.91	0	0.00	1	0.95	0	0.00	1	0.92	1	0.90	1	0.95
	Fort Irwin, CA	1	0.90	0	0.00	0	0.00	1	0.96	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	2	2.09
	Fort Leavenworth, KS	0	0.00	1	1.21	0	0.00	6	7.52	1	1.16	1	1.16	0	0.00	2	2.39	9	10.09	2	2.27
	Fort Leonard Wood, MO	47	18.16	37	15.45	9	3.72	8	3.23	9	3.70	5	1.95	1	0.37	5	1.82	2	0.78	7	2.82
	Fort Lewis, WA	1	0.12	1	0.12	3	0.36	2	0.24	11	1.27	4	0.47	1	0.12	1	0.12	0	0.00	1	0.12
	Fort Richardson, AK	0	0.00	0	0.00	2	1.11	1	0.55	2	1.09	3	1.62	1	0.55	6	3.41	5	2.91	4	2.37
	Fort Riley, KS	5	1.04	6	1.23	12	2.45	5	1.05	1	0.21	1	0.22	0	0.00	1	0.23	0	0.00	0	0.00
	Fort Wainwright, AK	3	1.81	3	1.83	3	1.89	8	5.06	17	10.71	4	2.65	5	3.40	11	7.13	40	25.07	36	23.86
PACIFIC																					
	Camp Carroll	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1	5.60
	Camp Casey	0	0.00	5	3.85	2	1.60	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
	Camp Humphreys	1	1.30	1	1.29	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
	Camp Long	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
	Camp Stanley/Red Cloud	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
	Japan	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1	5.46	0	0.00	0	0.00	0	0.00
	Schofield Barracks-Wheeler AAF	1	0.23	2	0.47	5	1.20	12	2.89	5	1.20	3	0.72	6	1.49	11	2.76	8	2.02	6	1.52
	USA Hawaii	0	0.00	1	13.94	1	14.37	0	0.00	1	14.15	0	0.00	0	0.00	1	13.98	2	28.97	0	0.00
	Yongsan Garrison	3	2.29	1	1.20	2	2.25	1	1.13	1	1.11	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
EUROPEAN																					
	Ansbach	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
	Baden-Wuerttemberg	0	0.00	0	0.00	0	0.00	4	4.35	1	1.31	1	1.71	0	0.00	0	0.00	0	0.00	0	0.00
	Bamberg	3	3.37	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1	1.70	1	1.82	0	0.00	0	0.00
	BeNeLux	0	0.00	0	0.00	1	6.90	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1	7.19	0	0.00
	Grafenwoehr	1	1.56	1	1.68	1	1.77	1	1.83	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
	Kaiserslautern	0	0.00	0	0.00	0	0.00	0	0.00	1	28.32	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
	Schweinfurt	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
	Stuttgart	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1	24.16	0	0.00
	Vicenza	2	2.89	2	2.88	1	1.47	2	2.90	1	1.81	0	0.00	0	0.00	1	1.81	0	0.00	2	2.98
	Wiesbaden	0	0.00	0	0.00	0	0.00	1	2.17	1	2.10	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
1. Rate is provided per 1,000 person-years.																					

1. Rate is provided per 1,000 person-years.

Active Duty- U.S. Army
NIHI Quarterly Surveillance Q3 2011 – Q4 2013

US Army TINNITUS diagnoses, Q3 2011- Q4 2013		Q3 2011		Q4 2011		Q1 2012		Q2 2012		Q3 2012		Q4 2012		Q1 2013		Q2 2013		Q3 2013		Q4 2013	
		Count	Rate ¹	Count	Rate ¹	Count	Rate ¹	Count	Rate ¹	Count	Rate ¹	Count	Rate ¹	Count	Rate ¹	Count	Rate ¹	Count	Rate ¹	Count	Rate ¹
NORTHERN																					
Aberdeen Proving Ground, MD	0	0.00	5	23.84	4	19.56	1	4.92	2	9.91	2	9.97	4	20.11	5	24.92	1	4.83	1	4.89	
Fort Belvoir, VA	8	11.41	11	13.90	10	12.85	8	10.18	7	8.41	13	15.92	18	23.09	18	22.84	16	19.67	18	22.36	
Fort Bragg, NC	142	11.78	135	11.22	193	16.14	171	14.40	165	13.86	164	13.79	201	17.62	218	19.22	146	12.76	199	17.38	
Fort Detrick, MD	5	21.98	3	11.41	1	4.45	3	14.78	6	30.15	4	19.90	4	20.32	5	25.09	3	14.58	4	19.72	
Fort Dix, NJ	0	0.00	0	0.00	2	25.67	2	25.44	3	38.81	2	26.09	1	12.39	4	48.05	2	23.91	0	0.00	
Fort Drum, NY	34	7.14	49	10.22	91	19.61	76	16.88	47	10.58	78	18.16	68	16.28	40	9.57	58	13.67	56	12.96	
Fort Eustis, VA	14	9.45	9	6.37	19	14.55	19	15.26	10	8.15	11	9.03	15	12.55	14	11.32	13	10.01	11	8.21	
Fort George G Meade, MD	12	16.43	10	13.43	17	22.80	10	13.10	16	20.41	14	17.80	10	13.27	12	15.35	17	21.62	16	20.29	
Fort Knox, KY	57	22.74	54	24.72	145	71.05	96	43.66	67	29.47	59	28.06	109	55.40	80	37.03	39	17.65	25	12.37	
Fort Lee, VA	24	13.18	17	9.56	24	14.51	25	15.57	20	11.90	21	12.14	27	16.28	27	15.11	14	7.74	22	13.47	
Fort Myer, VA	4	8.53	0	0.00	4	8.53	5	10.56	5	10.23	6	11.35	10	19.20	8	15.27	8	15.24	1	1.95	
Fort Monmouth, NJ	0	0.00	0	0.00	0	0.00	0	0.00	1	46.53	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	
Walter Reed AMC, DC	4	11.16	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	
West Point USMA, NY	1	2.57	3	7.88	0	0.00	6	15.95	3	7.81	10	27.20	0	0.00	5	13.63	8	21.40	3	8.30	
SOUTHERN																					
Fort Benning, GA	76	13.32	38	6.75	69	12.22	63	11.06	58	10.23	79	14.17	69	12.50	57	10.16	54	9.49	77	14.13	
Fort Campbell, KY	205	24.62	193	23.34	227	28.31	296	37.80	333	43.67	212	28.47	189	26.33	159	22.01	142	19.27	182	24.75	
Fort Gordon, GA	19	9.03	16	8.18	22	11.80	11	5.74	16	8.28	20	10.71	22	12.02	14	7.05	18	8.82	18	8.93	
Fort Hood, TX	113	9.74	122	10.69	143	12.76	156	14.10	138	12.57	115	10.79	98	9.74	101	10.13	79	7.90	92	9.31	
Fort Jackson, SC	15	7.36	8	3.85	14	6.66	9	4.37	27	11.56	25	10.63	14	5.47	24	9.67	13	5.63	18	7.74	
Fort McPherson, GA	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	
Fort Polk, LA	90	41.56	96	44.57	112	53.77	74	37.34	63	32.22	52	26.59	38	19.73	53	27.08	47	23.78	39	19.65	
Fort Rucker, AL	16	17.23	12	13.17	20	22.39	11	12.33	13	14.19	8	8.80	25	28.81	21	25.05	26	30.25	19	22.99	
Fort Sam Houston, TX	49	24.72	42	22.19	34	17.94	37	17.94	65	30.45	60	28.25	52	25.05	34	16.53	42	20.00	28	13.40	
Fort Sill, OK	45	14.77	28	10.13	38	14.14	25	9.03	40	13.69	17	5.92	32	11.19	20	7.25	15	5.19	15	5.45	
Fort Stewart, GA	98	20.99	77	16.96	96	21.72	65	14.94	84	18.86	63	14.39	79	18.84	54	13.02	91	21.66	83	19.67	
Redstone Arsenal, AL	3	14.80	5	28.42	7	41.85	3	17.60	4	22.75	3	17.58	2	12.16	12	71.73	7	40.92	5	30.04	
WESTERN																					
Fort Bliss, TX	182	28.85	110	16.33	121	17.82	118	17.49	140	20.69	136	20.35	138	21.69	117	18.33	162	24.80	136	20.61	
Fort Carson, CO	134	20.65	124	19.19	86	13.62	100	16.18	96	15.53	88	14.46	105	17.44	75	12.44	87	14.32	70	11.44	
Fort Huachuca, AZ	6	4.95	15	13.23	19	17.23	11	10.23	11	10.39	10	9.79	14	14.21	15	14.22	12	11.13	14	13.70	
Fort Irwin, CA	24	22.20	27	25.72	22	21.65	20	19.98	18	17.56	22	21.67	29	30.03	15	15.68	21	22.28	22	24.12	
Fort Leavenworth, KS	11	13.57	15	18.70	12	15.03	18	23.26	7	8.37	10	12.01	9	11.06	8	9.87	24	27.98	14	16.63	
Fort Leonard Wood, MO	20	7.74	18	7.52	35	14.54	27	11.02	28	11.67	26	10.28	26	9.85	22	8.13	19	7.57	24	9.88	
Fort Lewis, WA	118	14.96	139	17.19	160	19.86	170	20.97	107	12.87	193	23.38	199	25.11	225	28.66	179	22.91	129	16.57	
Fort Richardson, AK	39	22.40	57	32.74	20	11.55	19	10.93	26	14.68	57	32.09	30	17.32	36	21.34	29	17.58	38	23.44	
Fort Riley, KS	28	5.88	19	3.93	34	7.02	28	5.96	23	4.98	16	3.54	40	9.29	44	10.30	33	7.72	23	5.36	
Fort Wainwright, AK	21	13.02	23	14.45	18	11.67	59	38.61	38	24.88	26	17.86	32	22.59	43	28.94	20	12.97	17	11.59	
PACIFIC																					
Camp Carroll	1	5.89	3	17.67	0	0.00	0	0.00	0	0.00	2	11.94	3	18.53	1	5.85	2	11.06	3	17.33	
Camp Casey	2	1.47	5	3.89	6	4.87	1	0.80	1	0.80	2	1.60	9	7.48	23	18.57	15	11.52	4	3.10	
Camp Humphreys	2	2.63	3	3.91	5	6.88	2	2.79	2	2.78	3	4.05	8	11.00	5	6.61	10	11.29	7	7.90	
Camp Long	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	
Camp Stanley/Red Cloud	1	37.24	0	0.00	0	0.00	1	42.84	0	0.00	1	38.71	0	0.00	1	49.94	0	0.00	0	0.00	
Japan	1	5.46	0	0.00	2	11.13	1	5.62	2	11.22	0	0.00	3	16.62	3	16.09	2	10.80	1	5.83	
Schofield Barracks-Wheeler AAF	68	15.84	56	13.54	65	16.03	130	32.36	74	18.30	67	16.70	103	26.51	79	20.61	47	12.29	47	12.35	
USA Hawaii	3	44.88	2	29.71	4	61.60	1	15.81	2	30.45	1	14.93	4	60.42	0	0.00	2	30.95	4	61.31	
Yongsan Garrison	6	4.65	5	6.07	7	8.03	5	5.77	5	5.67	8	9.13	12	13.93	17	18.69	3	3.03	8	7.96	
EUROPEAN																					
Ansbach	2	6.29	1	3.05	5	13.88	5	13.82	6	16.21	2	5.37	1	2.87	2	6.38	2	6.21	3	8.28	
Baden-Wuerttemberg	11	10.12	3	3.10	7	7.40	9	10.05	8	10.71	11	19.42	11	26.13	5	19.07	5	26.86	5	22.33	
Bamberg	24	27.83	21	22.60	21	23.91	20	26.18	9	12.89	8	12.64	5	8.71	10	18.76	8	20.62	5	31.78	
BeNeLux	2	13.99	0	0.00	5	36.25	2	14.61	2	14.52	2	14.68	1	7.40	1	7.33	0	0.00	3	23.59	
Grafenwoehr	9	14.41	5	8.59	5	9.09	12	22.60	10	18.51	9	18.66	15	35.37	9	22.97	6	13.99	11	19.25	
Kaiserslautern	0	0.00	0	0.00	0	0.00	1	34.19	1	29.14	0	0.00	1	31.70	0	0.00	0	0.00	1	21.24	
Schweinfurt	11	12.54	3	3.57	7	8.56	16	19.95	9	12.11	12	20.80	11	23.93	13	41.63	2	10.94	1	11.52	
Stuttgart	0	0.00	1	19.72	2	40.41	0	0.00	1	25.69	0	0.00	1	26.10	0	0.00	0	0.00	2	54.71	
Vicenza	16	23.71	28	41.50	22	33.47	7	10.53	6	11.23	2	3.79	9	17.41	2	3.73	4	7.28	5	7.65	
Wiesbaden	3	6.77	4	9.99	8	17.29	5	11.13	2	4.29	5	9.68	8	14.84	10	17.94	11	20.77	4	8.98	

1. Rate is provided per 1,000 person-years.

Active Duty- U.S. Army
NIHI Quarterly Surveillance Q3 2011 – Q4 2013

US Army Noise-Induced Hearing Injuries, Q3 2011 - Q4 2013

	Q3 2011		Q4 2011		Q1 2012		Q2 2012		Q3 2012		Q4 2012		Q1 2013		Q2 2013		Q3 2013		Q4 2013	
	Count	Rate ¹	Count	Rate ¹	Count	Rate ¹	Count	Rate ¹	Count	Rate ¹	Count	Rate ¹	Count	Rate ¹	Count	Rate ¹	Count	Rate ¹	Count	Rate ¹
Occupation (Army)																				
Infantry, Gun Crew, and Seaman	1,446	54.80	1,378	53.35	1,518	60.25	1,547	62.12	1,504	60.58	1,193	49.02	1,105	46.89	1,254	53.45	1,233	52.31	1,130	48.58
Electronic Equipment Repairers	199	30.73	173	27.39	183	29.98	178	29.99	193	33.20	143	25.26	163	29.82	155	28.33	151	27.61	125	23.39
Communications and Intelligence Specialists	519	42.65	414	34.02	405	33.25	474	39.05	443	35.97	398	32.53	365	30.51	435	36.31	415	34.38	411	34.28
Health Care Specialists	294	35.47	241	29.03	257	31.06	262	31.51	268	31.65	231	27.33	233	28.24	199	23.95	217	25.72	218	26.14
Other Technical and Allied Specialists	149	37.60	120	30.46	136	35.41	128	34.07	136	36.28	141	38.27	103	28.89	99	27.82	127	36.25	92	26.91
Functional Support and Admin	451	31.26	379	26.80	395	28.58	401	29.20	395	28.75	333	24.52	362	27.48	371	27.93	341	25.45	310	23.25
Electrical/Mechanical Equip. Repairers	495	35.58	449	32.65	465	34.69	555	42.08	560	42.72	389	30.06	416	33.26	408	32.58	426	33.82	332	26.50
Craftwork & Construction	157	54.75	99	35.02	104	37.90	115	42.64	126	47.02	117	44.55	67	26.30	69	27.08	76	30.02	81	32.47
Service, Transport & Supply	596	41.10	480	34.18	500	37.08	604	46.39	535	41.88	451	36.45	486	41.00	400	34.36	395	34.17	327	28.85
Students & Trainees	8	12.21	12	18.98	24	35.08	15	26.43	11	17.00	11	19.94	15	21.05	28	38.15	24	30.87	13	18.36
General/Flag, Off. & Executives	3	63.09	5	106.53	3	64.54	4	84.58	3	61.99	1	20.29	8	165.92	5	103.63	4	80.13	4	80.93
Tactical Operations Officers	221	31.35	190	27.28	201	29.34	191	27.40	232	33.00	168	24.25	181	26.85	153	22.13	205	29.45	153	22.81
Intelligence Officers	59	38.13	29	18.92	29	19.04	49	32.00	34	21.89	34	22.17	38	25.51	39	25.92	43	28.28	38	25.17
Engineering & Maintenance Officers	103	31.42	93	28.85	88	27.43	87	26.77	105	31.87	83	25.66	72	22.98	63	19.83	80	24.28	89	26.24
Scientists & Professionals	43	30.73	41	29.21	39	27.65	45	31.91	47	33.17	31	21.70	45	32.16	36	25.35	47	33.43	46	32.56
Health Care Officers	108	29.66	86	23.80	77	21.56	106	29.51	86	23.35	76	20.74	78	21.89	79	21.91	87	23.66	63	17.25
Administrators	62	37.45	49	29.85	48	29.39	61	37.49	46	27.63	32	18.89	30	18.25	35	20.98	36	21.31	40	23.72
Supply & Logistics Officers	89	40.46	61	28.00	67	31.19	73	33.95	63	28.94	65	30.36	61	29.27	85	40.50	78	36.67	68	32.43
Students, Trainees & Other Officers	13	26.10	5	9.16	7	14.59	10	20.97	12	25.20	5	10.42	8	15.96	7	13.16	12	22.03	12	21.78
By Diagnosis																				
DoD - SNHL	2,350	7.18	2,429	7.50	2,692	8.46	2,897	9.17	2,377	7.47	2,199	6.97	2,325	7.55	2,326	7.49	2,458	7.83	2,184	7.01
DoD - STS	3,594	10.99	2,825	8.72	3,175	9.98	3,327	10.53	2,929	9.20	1,972	6.25	2,003	6.51	2,138	6.88	2,460	7.83	1,894	6.08
DoD - NIHL	267	0.82	290	0.90	313	0.98	276	0.87	343	1.08	296	0.94	231	0.75	249	0.80	242	0.77	198	0.64
DoD - TINN	2,332	7.13	2,419	7.47	2,956	9.29	2,897	9.17	2,621	8.23	2,577	8.17	3,012	9.79	2,824	9.09	2,469	7.86	2,326	7.46
Army - SNHL	1,089	8.71	1,132	9.20	1,258	10.43	1,366	11.45	1,034	8.66	950	8.08	1,079	9.45	948	8.28	957	8.31	926	8.14
Army - STS	2,808	22.47	2,063	16.76	2,001	16.59	2,353	19.72	2,609	21.84	1,832	15.58	1,626	14.24	1,895	16.55	2,066	17.94	1,638	14.39
Army - NIHL	167	1.34	187	1.52	181	1.50	137	1.15	191	1.60	175	1.49	83	0.73	94	0.82	105	0.91	111	0.98
Army - TINN	951	7.61	922	7.49	1,106	9.17	1,049	8.79	965	8.08	945	8.04	1,048	9.18	983	8.59	869	7.54	877	7.71
Sex (Army)																				
Male	4,563	42.65	3,949	37.49	4,180	40.50	4,483	43.90	4,424	43.27	3,603	35.83	3,453	35.35	3,557	36.32	3,646	37.04	3,245	33.40
Female	452	25.15	355	19.98	366	21.05	422	24.56	375	21.77	299	17.57	383	23.16	363	21.94	351	20.95	307	18.44
Age (Army)																				
<20	219	23.71	151	17.34	157	18.93	154	19.56	190	22.75	125	15.08	123	15.89	131	18.00	169	18.49	113	11.97
20-24	1,461	36.07	1,329	33.50	1,451	37.34	1,544	39.98	1,462	38.10	1,191	31.68	1,139	31.44	1,271	35.12	1,176	32.41	1,084	29.96
25-29	1,121	35.90	1,036	33.55	1,078	35.59	1,181	39.55	1,178	39.78	889	30.63	930	33.00	897	31.92	925	33.54	812	30.16
30-34	737	39.04	565	29.84	609	32.49	682	36.47	681	36.21	577	30.89	527	28.71	534	28.67	556	30.23	498	27.53
35-39	645	47.80	509	38.24	493	37.97	502	39.29	532	41.90	436	34.83	467	38.35	396	32.34	441	36.57	428	36.21
>=40	832	71.59	714	61.58	758	66.29	842	73.32	756	65.01	684	59.50	650	56.39	691	57.41	730	62.24	617	54.41
Deployment Association² (Army)																				
COUNTS ONLY																				
OIF-associated	415	N/A	554	N/A	316	N/A	213	N/A	90	N/A	62	N/A	30	N/A	34	N/A	46	N/A	47	N/A
OEF-associated	774	N/A	506	N/A	666	N/A	998	N/A	1,000	N/A	623	N/A	503	N/A	621	N/A	747	N/A	722	N/A
Not Deployment Associated	3,826	N/A	3,244	N/A	3,564	N/A	3,694	N/A	3,709	N/A	3,217	N/A	3,303	N/A	3,265	N/A	3,204	N/A	2,783	N/A

1. Rate is provided per 1,000 person-years.

2. The diagnosis occurred during or within 180 days of a deployment.

Active Duty- U.S. Army
NIHI Quarterly Surveillance Q3 2011 – Q4 2013

Army Regional Totals Counts & Rates, Q3 2011 - Q4 2013

US Army SENSORINEURAL HEARING LOSS diagnoses, Q3 2011 - Q4 2013																				
	Q3 2011		Q4 2011		Q1 2012		Q2 2012		Q3 2012		Q4 2012		Q1 2013		Q2 2013		Q3 2013		Q4 2013	
	Count	Rate ¹	Count	Rate ¹	Count	Rate ¹	Count	Rate ¹	Count	Rate ¹	Count	Rate ¹	Count	Rate ¹	Count	Rate ¹	Count	Rate ¹	Count	Rate ¹
NORTHERN	268	10.55	300	12.13	445	18.49	406	16.97	303	12.56	253	10.60	320	13.94	289	12.38	242	10.22	282	12.05
SOUTHERN	619	14.72	568	13.84	685	17.01	648	16.15	660	16.32	481	12.12	490	12.69	482	12.50	515	13.22	502	13.06
WESTERN	580	17.24	630	18.53	622	18.42	666	19.89	538	15.98	631	18.92	620	19.14	592	18.21	567	17.41	575	17.75
PACIFIC	151	19.30	122	17.04	114	16.22	209	29.90	104	14.73	110	15.55	134	19.44	107	15.32	122	16.82	109	15.10
EUROPEAN	65	12.97	43	8.87	58	12.09	93	20.28	37	8.77	47	12.35	45	13.17	31	10.18	22	8.01	18	6.74

US Army SIGNIFICANT THRESHOLD SHIFT diagnoses, Q1 2009 - Q4 2013

	Q3 2011		Q4 2011		Q1 2012		Q2 2012		Q3 2012		Q4 2012		Q1 2013		Q2 2013		Q3 2013		Q4 2013	
	Count	Rate ¹	Count	Rate ¹	Count	Rate ¹	Count	Rate ¹	Count	Rate ¹	Count	Rate ¹	Count	Rate ¹	Count	Rate ¹	Count	Rate ¹	Count	Rate ¹
NORTHERN	315	12.32	271	10.88	453	18.70	320	13.28	658	27.13	234	9.78	182	7.90	196	8.35	196	8.23	212	8.99
SOUTHERN	826	19.93	585	14.44	523	13.12	907	22.83	606	15.11	730	18.53	696	18.15	701	18.31	1,186	30.75	847	22.30
WESTERN	1,864	55.46	1,327	39.45	1,119	33.56	1,246	37.83	1,595	48.43	1,023	31.51	712	22.56	1,073	33.95	787	24.84	748	23.73
PACIFIC	18	2.21	4	0.54	94	12.87	80	11.01	57	7.81	54	7.42	66	9.35	63	8.84	42	5.70	6	0.82
EUROPEAN	25	4.91	8	1.62	20	4.09	38	8.13	24	5.58	14	3.62	96	27.69	53	17.32	25	9.10	20	7.50

US Army NOISE-INDUCED HEARING LOSS diagnoses, Q3 2011 - Q4 2013

	Q3 2011		Q4 2011		Q1 2012		Q2 2012		Q3 2012		Q4 2012		Q1 2013		Q2 2013		Q3 2013		Q4 2013	
	Count	Rate ¹	Count	Rate ¹	Count	Rate ¹	Count	Rate ¹	Count	Rate ¹	Count	Rate ¹	Count	Rate ¹	Count	Rate ¹	Count	Rate ¹	Count	Rate ¹
NORTHERN	94	3.57	58	2.26	96	3.84	79	3.17	73	2.90	63	2.53	84	3.51	75	3.08	66	2.67	69	2.82
SOUTHERN	78	1.78	83	1.93	93	2.21	67	1.59	60	1.41	59	1.42	35	0.86	23	0.57	12	0.29	12	0.30
WESTERN	82	2.31	127	3.54	83	2.33	67	1.89	163	4.57	161	4.56	43	1.25	72	2.09	124	3.60	119	3.47
PACIFIC	5	0.60	10	1.31	10	1.34	13	1.74	7	0.93	3	0.40	7	0.96	12	1.62	10	1.30	7	0.92
EUROPEAN	6	1.15	3	0.59	3	0.60	8	1.66	4	0.90	1	0.25	1	0.28	2	0.62	2	0.69	2	0.71

US Army TINNITUS diagnoses, Q3 2011 - Q4 2013

	Q3 2011		Q4 2011		Q1 2012		Q2 2012		Q3 2012		Q4 2012		Q1 2013		Q2 2013		Q3 2013		Q4 2013	
	Count	Rate ¹	Count	Rate ¹	Count	Rate ¹	Count	Rate ¹	Count	Rate ¹	Count	Rate ¹	Count	Rate ¹	Count	Rate ¹	Count	Rate ¹	Count	Rate ¹
NORTHERN	305	11.81	296	11.77	510	20.83	422	17.34	352	14.36	384	15.84	467	20.04	436	18.42	325	13.53	356	14.99
SOUTHERN	729	17.03	637	15.24	782	19.08	750	18.39	841	20.46	654	16.23	620	15.80	549	14.01	534	13.49	576	14.74
WESTERN	583	16.90	547	15.71	527	15.23	570	16.62	494	14.32	584	17.09	622	18.75	600	18.05	586	17.61	487	14.72
PACIFIC	84	10.30	74	9.92	89	12.17	141	19.37	86	11.73	84	11.47	142	19.95	129	17.94	81	10.88	74	9.99
EUROPEAN	78	15.27	66	13.35	82	16.77	77	16.46	54	12.53	51	13.13	63	18.06	52	16.72	38	13.58	40	14.75